WHAT IS CLAIMED IS:

1. A method of correcting white balance, comprising the steps of:

estimating, by using at least gray and/or skin color information contained in an input color image, a color temperature of a photographing light source with which a color image has been formed; and

correcting an image signal of the color image based on the estimated color temperature.

2. The method according to claim 1, wherein only said gray and skin color information is used.

3. The method according to claim 1, wherein

said estimating step includes:

multiplying image signals of each pixel in the input color image by set coefficients;

setting pixels having the multiplied image signals in the vicinity of a blackbody locus curve of skin color as skin color candidate pixels and/or pixels having the multiplied image signals in the vicinity of a blackbody locus curve of gray as gray candidate pixels;

optimizing the set coefficients so that the number of the skin color candidate pixels and/or the gray candidate

pixels is maximized;

obtaining a group of skin color candidate pixels and/or a group of gray candidate pixels by using the optimized set coefficients; and

estimating said color temperature of said photographing light source from an average color temperature of the group of skin color candidate pixels and/or an average color temperature of the group of gray candidate pixels, and wherein

said image signals of the color image multiplied by the optimized set coefficients are corrected by an amount corresponding to a difference between the estimated color temperature and a color temperature of reference white.

4. The method according to claim 3, wherein the color temperature of the photographing light source is estimated from the average color temperature of the group of skin color candidate pixels and the average color temperature of the group of gray candidate pixels obtained by optimizing the set coefficients so that the number of the skin color candidate pixels and the gray candidate pixels is maximized.

5. The method according to claim 1, wherein said estimating step includes:

multiplying image signals of each pixel in the input color image by set coefficients;

setting pixels having the multiplied image signals in the vicinity of a blackbody locus curve of skin color as skin color candidate pixels and pixels having the multiplied image signals in the vicinity of a blackbody locus curve of gray as gray candidate pixels;

optimizing the set coefficients so that a difference between an average color temperature of the skin color candidate pixels and an average color temperature of the gray candidate pixels is minimized;

obtaining a group of skin color candidate pixels and a group of gray candidate pixels by using the optimized set coefficients; and

estimating said color temperature of said photographing light source from the average color temperature of the group of skin color candidate pixels and the average color temperature of the group of gray candidate pixels, and wherein

said image signals of the color image multiplied by the optimized set coefficients are corrected by an amount corresponding to a difference between the estimated color temperature and a color temperature of reference white.

6. The method according to claim 1, wherein

said estimating step includes:

multiplying image signals of each pixel in the input color image by set coefficients;

setting pixels having the multiplied image signals in the vicinity of a blackbody locus curve of skin color as skin color candidate pixels and pixels having the multiplied image signals in the vicinity of a blackbody locus curve of gray as gray candidate pixels;

optimizing the set coefficients so that the number of the skin color candidate pixels and the gray candidate pixels is maximized and a difference between an average color temperature of the skin color candidate pixels and an average color temperature of the gray candidate pixels is minimized;

obtaining a group of skin color candidate pixels and a group of gray candidate pixels by using the optimized coefficients; and

estimating said color temperature of said photographing light source from the average color temperatures of the group of skin color candidate pixels and the group of gray candidate pixels, and wherein

said image signals of the color image multiplied by the optimized set coefficients are corrected by an amount

corresponding to a difference between the estimated color temperature and a color temperature of reference white.

7. The method according to claim 2, wherein, when each of the blackbody locus curve of the skin color and the blackbody locus curve of the gray is set, a spectral sensitivity of a photographing apparatus used to form the input color image is used as a spectral sensitivity distribution.

8. The method according to claim 2, wherein, when each of the blackbody locus curve of the skin color and the blackbody locus curve of the gray is set, a spectral sensitivity of BT709 is used as a spectral sensitivity distribution.

9. An apparatus for correcting white balance when digital image processing is performed on an input color image to form a print, comprising:

an estimation device for estimating, by using at least gray and/or skin color information contained in the input color image, a color temperature of a photographing light source with which a color image has been formed; and

a correction device for correcting an image signal of

the color image based on the estimated color temperature.

10. The apparatus according to claim 9, wherein said estimation device includes:

a multiplication device for multiplying image signals of each pixel in the input color image by set coefficients;

a detection device for detecting pixels having the multiplied image signals in the vicinity of a blackbody locus curve of skin color as skin color candidate pixels, and pixels having the multiplied signals in the vicinity of a blackbody locus curve of gray as gray candidate pixels;

an optimization device for optimizing the set coefficients so that the number of the skin color candidate pixels and the gray candidate pixels is maximized and so that a difference between an average color temperature of the skin color candidate pixels or for optimizing the set coefficients so that an average color temperature of the gray candidate pixels is minimized, to obtain a group of skin color candidate pixels and a group of the gray candidate pixels, or for both optimizing; and

a computation device for calculating the color temperature of the photographing light source from the average color temperature of the group of skin color candidate pixels and the average color temperature of the

group of gray candidate pixels, and wherein

said correction device corrects the image signals of the color image multiplied by the optimized set coefficients, by an amount corresponding to a difference between the estimated color temperature and a color temperature of reference white.

11. A method of correcting density, comprising the steps of:

multiplying image signals of each pixel in an input color image by set coefficients to detect pixels having the multiplied image signals in the vicinity of a blackbody locus curve of skin color as skin color candidate pixels; and

assigning an average obtained for a predetermined color signal from said skin color candidate pixels detected to a predetermined density of a color corresponding to said color signal on a print.

12. The method of correcting density according to claim 11, wherein said predetermined color signal is a green signal and an average green signal obtained from said skin color candidate pixels detected is assigned to a predetermined green density on a print.

13. A method of correcting density according to claim 12, wherein said predetermined green density is 0.7 - 1.0.

14. A recording medium on which one or both of a method of correcting white balance and a method of correcting density are recorded in a computer-readable manner as a program to be executed by a computer,

wherein said method of correcting the white balance, comprising the steps of:

estimating, by using at least gray and/or skin color information contained in an input color image, a color temperature of a photographing light source with which a color image has been formed; and

correcting an image signal of the color image based on the estimated color temperature, and

wherein said method of correcting the density, comprising the steps of:

multiplying the image signals of each pixel in the input color image by the set coefficients to detect the pixels having the multiplied image signals in the vicinity of the blackbody locus curve of the skin color as the skin color candidate pixels; and

assigning an average obtained for a predetermined

color signal from said skin color candidate pixels detected to a predetermined density of a color corresponding to said color signal on a print.